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REMARKS

Applicants thank Examiner Ly T Tran for having indicated that claims 9 through 15, and claim 26, would be allowed if suitably amended. Those claims have now been so amended, and are believed to be in condition for allowance.

The Applicants respectfully call attention to the fact that claim 2 is omitted from the specific discussion — in the Official Action — of claim rejections. This claim, and its dependent claim 3, are taken up below.

Section 102 rejections

The summary coversheet of the Official Action indicates that claims 1 through 8, claim 16, and claims 18 through 25 are all rejected as anticipated by Osborne. In the text of the Official Action, however, the list of claims anticipated by Osborne omits claim 2 (see page 4 of the Action, at the beginning of the paragraph numbered "2").

Applicants respectfully submit that Osborne says nothing of specific dimensions such as recited in Applicants' claim 2, and therefore that it was possibly intended to include this claim in the "objected to" group. If so, then the same should be true of claim 3 — which depends from claim 2 and adds another specific dimension.

The Applicants wish to point out that the dimensions recited in claims 2 and 3 were obtained by experimentation and observation, and that such effort is recognized as one way of making a patentable invention. Applicants also believe that the Osborne reference fails to teach the specific values recited in claims 2 and 3, and Applicants therefore ask that these claims be allowed. Claims 2 and 3 have been recast in

independent form to facilitate such action in event the Examiner agrees.

It is also said in the Official Action that claim 1, claims 3 through 8, claim 16, and claims 18 through 25 are all anticipated by Osborne. In addition to claim 3 discussed above, the Applicants respectfully traverse with respect to claims 5 through 8, and also claim 24.

Those five claims recite a "shuttle" — and claim 24 in particular a "reciprocating shuttle". Osborne's intermediate spittoon configurations all appear to be rotary, having neither a shuttling action nor any sort of reciprocation.

Osborne's structures identified in the Official Action as a "shuttle" are actually pen-capping devices. Moreover, certain of these claims refer to plural orientations of the intermediate spittoon; but Osborne's intermediate spittoon is cylindrically symmetrical, and so does not pass through distinguishably different "orientations" as it rotates.

Therefore the Applicants respectfully submit that the Osborne reference is inapposite to claims 5 through 8, and claim 24. Applicants ask that rejection of those claims be withdrawn, and again they have been rewritten in independent form to expedite favorable action.

The remaining rejected claims — namely claims 1, 4, 16, 18 through 23, and 25 — have all been amended to recite features not seen in Osborne. Allowance of these claims too is respectfully requested.

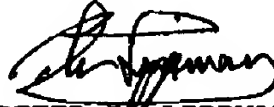
Conclusion

In view of the foregoing amendments and remarks, Applicants respectfully request the Examiner's favorable recon-

sideration and allowance of all the claims now standing in this case.

It is respectfully requested that, should there appear any further obstacle to allowance of the claims herein, the Examiner telephone the undersigned attorney to try to resolve the obstacle.

Respectfully submitted,



PETER I. LIPPMAN

Registration No. 22,835

Attorney for the Applicants

Ashen & Lippman
4385 Ocean View Boulevard
Montrose, California 91020

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TELEPHONE:
818/249-5961

MARKED-UP COPIES OF THE AMENDED AND NEW CLAIMS

1 1. (amended) An inkjet device comprising:
2 at least one printhead arranged to eject ink drops
3 in a spitting operation; [and]
4 a spittoon arranged to store the [said] ejected ink;
5 and [, said device further comprising]
6 a generally planar shelf mounted for rocking motion
7 [temporary spittoon arranged to move] between:

8
9 a first [and second] position [s] for di-
10 rectly receiving and retaining the
11 ejected ink from the printhead
12 [, said temporary spittoon being ar-
13 ranged in said first position such
14 that said ink drops are ejected onto
15 a surface of said temporary spit-
16 toon], and

17
18 a second position for [said temporary
19 spittoon being further arranged to]
20 transferring the received ink to the
21 spittoon by spilling the received
22 [said] ink from the shelf into the
23 [said] spittoon [when in said second
24 position].

1 2. (amended) An inkjet device comprising:
2 at least one printhead arranged to eject ink drops
3 in a spitting operation;
4 a spittoon arranged to store the ejected ink; and
5 a temporary spittoon arranged to move between first
6 and second positions, said temporary spittoon being ar-
7 anged in the first position so that the ink drops are
8 ejected onto a surface of said temporary spittoon, and
9 said temporary spittoon being further arranged to trans-
10 fer the ink to the spittoon when in the second position;
11 [according to claim 1,]
12 wherein the [said] surface of the [said] temporary
13 spittoon is approximately 1 mm to 10 mm from the [said]
14 printhead when the [said] temporary spittoon is in the /
15 [said] first position.

1 4. (amended) A device according to [any of] claim [s]
2 1 [to 3], wherein:
3 the shelf [said surface of said temporary spittoon]
4 is substantially horizontal when [said temporary spittoon
5 is] in the [said] first position.

1 5. (amended) An inkjet device comprising:
2 at least one printhead arranged to eject ink drops
3 in a spitting operation;
4 a spittoon arranged to store the ejected ink; and
5 a temporary spittoon arranged to move between first
6 and second positions, said temporary spittoon being ar-
7 ranged in the first position so that the ink drops are
8 ejected onto a surface of said temporary spittoon, and
9 said temporary spittoon being further arranged to trans-
10 fer the ink to the spittoon when in the second position;
11 [according to claim 4,] ✓
12 wherein the [said] temporary spittoon is mounted on
13 a shuttle, said shuttle being arranged to move the [said]
14 temporary spittoon between the [said] first and second
15 positions.

1 6. (amended) A device according to claim 5, wherein:
2 the [said] temporary spittoon is arranged to be
3 oriented [orientated] in a first orientation when in the
4 [said] first position and in a second orientation differ-
5 ent from the [to said] first orientation when positioned
6 in the [said] second position, such that when positioned
7 in the [said] second position the [said] temporary spit-
8 toon is arranged to transfer the [said] ink from the [on
9 said] spittoon surface by [under] gravity.

1 7. (amended) A device according to claim 6, wherein:
2 the [said] temporary spittoon is rotatably mounted
3 to the [said] shuttle and [is] arranged to pivot relative
4 to the shuttle [rotate about said mounting] between the
5 [said] first and [said] second orientations.

1 8. (amended) A device according to claim 7, wherein:
2 the [said] temporary spittoon is arranged to rotate
3 relative to the shuttle [about said mounting] under the
4 action of one or more cam surfaces.

1 9. (amended) An inkjet device comprising:
2 at least one printhead arranged to eject ink drops
3 in a spitting operation;
4 a spittoon arranged to store said ejected ink;
5 a temporary spittoon arranged to move between first
6 and second positions, said temporary spittoon being ar-
7 anged in the first position so that the ink drops are
8 ejected onto a surface of the temporary spittoon, and
9 said temporary spittoon being further arranged to trans-
10 fer the ink to the spittoon when in the second position;
11 and wherein:
12 the surface of the temporary spittoon is substan-
13 tially horizontal when the temporary spittoon is in the
14 first position;
15 the temporary spittoon is mounted on a shuttle, the
16 shuttle being arranged to move the temporary spittoon
17 between the first and second positions; and
18 the temporary spittoon is arranged to be oriented in
19 a first orientation when in the first position and in a
20 second orientation different from the first orientation
21 when positioned in the second position, such that when
22 positioned in the second position the temporary spittoon
23 is arranged to transfer the ink on the spittoon surface
24 under gravity; and [according to claim 6, wherein]
25 the [said] temporary spittoon comprises a flexible
26 material fixedly mounted to the [said] shuttle, the
27 [said] temporary spittoon being arranged to bend or de-
28 form between the [said] first and [said] second
29 orientations.

1 14. (amended) An inkjet device comprising:
2 at least one printhead arranged to eject ink drops
3 in a spitting operation;
4 a spittoon arranged to store the ejected ink;
5 a temporary spittoon arranged to move between first
6 and second positions, said temporary spittoon being ar-
7 ranged in the first position so that the ink drops are
8 ejected onto a surface of the temporary spittoon, and
9 said temporary spittoon being further arranged to trans-
10 fer the ink to the spittoon when in the second position;
11 wherein the surface of the temporary spittoon is
12 substantially horizontal when the temporary spittoon is
13 in the first position; and
14 wherein the temporary spittoon is mounted on a shut-
15 tle, said shuttle being arranged to move the temporary
16 spittoon between the first and second positions; and
17 [according to claim 5, further comprising]
18 a printhead servicing element comprising a cap or a
19 wiper arranged to be movable between a non-active posi-
20 tion distant from the [said] printhead and an active
21 position adjacent to the [said] printhead; [,]
22 wherein [,] the movement of the [said] temporary
23 spittoon is linked to that of the [said] servicing ele-
24 ment so [such] that the [said] temporary spittoon is
25 arranged to be in the [said] first position when the
26 [said] servicing element is in the [said] non-active
27 position and to be in the [said] second position when the
28 [said] servicing element is in active position.

1 16. (amended) A device according to claim 5: [,]
2 further comprising a plurality of pens; [,]
3 wherein in the [said] first position the [said]
4 temporary spittoon is arranged so [such] that ink drops
5 ejected in spitting operations by one or more of the ✓
6 [said] plurality of pens are ejected onto a surface of
7 the [said] temporary spittoon.

1 18. (amended) A device according to claim 16, further
2 comprising:
3 one or more scrapers arranged to remove ink from the
4 [said] temporary spittoon surface as the [said] temporary
5 spittoon moves between the [said] first and second ✓
6 positions.

1 19. (amended) A device according to claim 5, wherein:
2 the [said] device is arranged so [such] that in the
3 [said] second position the [said] temporary spittoon is
4 located substantially in contact with the [said] spittoon
5 or ink stored therein, the [said] temporary spittoon ✓
6 being adapted so [such] that the [said] ink on the [said]
7 temporary spittoon surface is able to flow from the
8 [said] temporary spittoon to the [said] spittoon.

1 20. (amended) A device according to claim 5, wherein:
2 the [said] temporary spittoon comprises a porous
3 body adapted to allow the [said] ink on the [said] tempo- ✓
4 rary spittoon surface to flow through the [said] tempo-
5 rary spittoon to the [said] spittoon.

1 21. (amended) A device according to [any] claim 5,
2 wherein;
3 the inkjet device is a printer.

1 22. (amended) An inkjet printhead servicing assembly
2 comprising:
3 a spittoon arranged to store ink ejected by an ink-
4 jet printhead in a spitting operation; and [, the assem-
5 bly further comprising]
6 a spitting shelf [surface mov] rockable between:

7
8 a first [and a second] position for di-
9 rectly receiving [, said spitting
10 surface being arranged to receive]
11 ink drops ejected by the [said ink-
12 jet] printhead in a spitting opera-
13 tion, and

14
15 a [being arranged to move to said] second
16 position for pouring the received
17 [and from said second position to
18 transfer said] ink off the shelf into
19 the [said] spittoon.

1 23. (amended) An inkjet device comprising:
2 at least one print head arranged to eject ink drops
3 in a spitting operation; [and]
4 a spittoon arranged to store the [said] ejected ink;
5 and [, the device further comprising]
6 a temporary ink receiver [spittoon] arranged and
7 powered to move between:
8
9 a first [and second] position [s, in said
10 first position said temporary spit-
11 toon being located] in relatively
12 closer proximity to a nozzle plate of
13 the [said] printhead, to intercept
14 ink with minimal formation of aero-
15 sol; and [arranged such that said
16 ejected ink drops are directed onto a
17 surface of said temporary spittoon,
18 in said]
19
20 a second position relatively more [said
21 temporary spittoon being arranged to
22 transfer said ink to said spittoon
23 and being located sufficiently] dis-
24 tant from the [said] nozzle plate to
25 allow [a] capping or wiping of the
26 nozzle plate [operation to be per-
27 formed].

1 24. (amended) An inkjet printhead servicing assembly
2 comprising:
3 a spitting surface; [and]
4 a cap assembly; [, said servicing assembly further
5 comprising]
6 a reciprocating shuttle arranged to move between
7 first and second positions and to actuate the [said]
8 spitting surface and the [said] cap assembly; [,]
9 the [said] servicing assembly being arranged so
10 [such] that:
11
12 when the [said] shuttle is in the [said]
13 first position the [said] cap assem-
14 bly is located distant to a nozzle
15 plate of the [said] printhead and the
16 [said] spitting surface is located in
17 close proximity to the [said] nozzle
18 plate so [such] that ink ejected from
19 the [said] nozzle plate during a
20 spitting routine is ejected onto the
21 [said] spitting surface; and [, said
22 servicing assembly being further ar-
23 ranged such that]
24
25 when the [said] shuttle is in the [said]
26 second position the [said] cap assem-
27 bly substantially caps the [said]
28 nozzle plate and the [said] spitting
29 surface is located in a position such
30 that the [said] ink ejected onto the
31 [said] spitting surface is transfer-
32 able under gravity to a permanent ink
33 storage container.

1 25. (amended) A method of servicing an inkjet printhead
2 with a servicing assembly; [,] said servicing assembly
3 comprising a spittoon arranged to store ink ejected by
4 said inkjet printhead in a spitting operation, and a
5 generally planar spitting surface; said [, the] method
6 comprising the steps of:
7 locating the [said] spitting surface in a first
8 position relatively closer to the printhead and generally
9 horizontal so [such] that drops ejected by the [said]
10 inkjet printhead in a spitting operation are ejected onto
11 the [said] spitting surface and generally are retained
12 thereon;
13 translating the [moving said] spitting surface to a
14 second position relatively more remote from the print-
15 head, allowing clearance for printhead wiping or capping,
16 and at the second position inclining the generally planar
17 spitting surface to discharge the retained [such that
18 said ejected] drops therefrom [may be transferred] into
19 the [said] spittoon.

1 26. (amended) A method of servicing an inkjet printhead
2 with a servicing assembly; said servicing assembly com-
3 prising a spittoon arranged to store ink ejected by said
4 inkjet printhead in a spitting operation, and a spitting
5 surface; said method comprising the steps of:
6 locating the spitting surface in a first position
7 such that drops ejected by the inkjet printhead in a
8 spitting operation are ejected onto the spitting surface;
9 moving the spitting surface to a second position
10 such that the ejected drops may be transferred to the
11 spittoon; and [according to claim 24, further comprising
12 the step of]
13 capping or wiping the [said] printhead when the
14 [said] spitting surface is in the [said] second position.